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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/684,949	10/10/2000	Winand D'Souza	367.39104X00	2913

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EXAMINER

D AGOSTA, STEPHEN M

ART UNIT PAPER NUMBER

2683

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/684,949	<b>Applicant(s)</b> D'SOUZA, WINAND	
	<b>Examiner</b> Stephen M. D'Agosta	<b>Art Unit</b> 2683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,14 and 18 is/are rejected.
- 7) ☒ Claim(s) 3-5, 8-12 and 15-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

This is a non-final office action in response to the applicant's recently filed RCE. The examiner has added new art to further refine his rejection to address the amended claim language, namely "acoustic audio path" and "attenuation".

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 6-7 and 18** rejected under 35 U.S.C. 103(a) as being unpatentable over Hawker et al. WO-97/47117 and further in view of Clark et al. US 6,292,563.

As per **claims 1 and 7**, Hawker teaches a portable (telecommunications) device (figure 1) comprising

A housing (figure 1, #12) having a first surface with an outlet for the egress of an acoustic signal when in a loudspeaker mode (figure 2, #46) and a second surface with an outlet for the egress of an acoustic signal when in the earpiece mode (figure 1, #20)

An electro-acoustic transducer located within the housing for converting an electrical signal input to the transducer into an acoustic signal, the transducer being operable to output acoustic signals when in the loudspeaker mode or the earpiece mode, the audio path between the transducer and the outlet for the egress of an acoustic signal when in the loudspeaker mode being less attenuated than the audio path between the transducer and the outlet for the egress of an acoustic signal when in

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the earpiece mode (page 6, L30-36 and page 7, L4-30) **but is silent on** an acoustical audio path being attenuated.

The examiner notes that the applicant's term "attenuation" is broadly interpreted to mean "volume control" since it's main purpose is to attenuate an audio signal when changing between earpiece and loudspeaker mode. **Clark** teaches a volume attenuator for flip-style hand-held phone (title, abstract) that increases/decrease the speaker volume to change as the flip phone is opened/closed (C2, L3-9). Hence, Clark teaches attenuation/volume control based on how the person attempts to use the phone and the volume they anticipate from the phone (ie. low/soft, loud, etc. via baffles). Therefore the combination of Hawker device with "attenuation/volume control" would be modified by Clark's teachings to arrive at the applicant's system.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hawker, such that an acoustical audio path is attenuated, to provide means for volume control of the portable device when either in earpiece or loudspeaker modes.

As per **claim 18**, Hawker teaches a portable (telecommunications) device (figure 1) comprising

A housing (figure 1, #12) having a first surface with an outlet for the egress of an acoustic signal when in a loudspeaker mode (figure 2, #46) and a second surface with an outlet for the egress of an acoustic signal when in the earpiece mode (figure 1, #20)

An electro-acoustic transducer located within the housing for converting an electrical signal input to the transducer into an acoustic signal (page 6, L30-36 and page 7, L4-30),

A first acoustical audio path defined within the housing between the transducer and the first outlet for the egress of the acoustic signal (figure 3 shows transducer #20 and path to front enclosure for egress via holes #40/#42 and also foam attenuation material, page 6, L10-13);

A second acoustical audio path defined within the housing between the transducer and the second outlet for the egress of the acoustic signal (figure 3 shows

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transducer #20 and path to back enclosure for egress via holes #46 and also foam attenuation material, page 6, L10-13); and

Attenuation means within the second acoustical audio path for attenuating the acoustic signal, whereby the acoustic signal egressing the first outlet had an amplitude that is greater than an amplitude of the acoustic signal egressing from the second outlet.

As per **claim 6**, Hawker teaches claim 1/3/5 wherein the device is a portable communication device (eg. cell phone, figure 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2 and 14** rejected under 35 U.S.C. 103(a) as being unpatentable over Hawker/Clark in view of Umemoto et al. US 5,379,338 (hereafter Umemoto).

As per **claim 2**, Hawker teaches claim 1 **but is silent on** an attenuator is provided between the transducer and the outlet for the egress of the acoustic signal when in earpiece mode.

Hawker does teach an audio amplifier that is increased to raise the level/lower the level of the audio sufficiently to allow the user to operate in either handsfree or earpiece mode (page 6, L30-36). So Hawker chooses to use a variable audio amplifier while the applicant chooses to use an attenuator to vary the amount of audio output. Since the use of an attenuator is well known, one skilled in the art would either use a variable amplifier or an attenuator to vary the amount of audio amplification.

The examiner notes that that attenuators/variable amplifiers are well known and would be used by one skilled in the art to provide the proper signal levels between the transducer and earpiece output (ie. to raise/lower the volume, increase signal levels, etc.). The examiner puts forth that that one skilled would not send the same signal to both the loudspeaker output and earpiece output since one requires a louder signal/output to project to a large area while the other (earpiece mode) requires a lower signal/output. The attenuator can be an active/passive component that allows one signal to be generated and is either routed around the attenuator (for loudspeaker) and/or is routed to the attenuator prior to outputting to the earpiece. **Umemoto** teaches two places for use -- the in-a-car mode or the field mode -- and three or more types of the using space mode may be used to cope with three or more types of using space with different acoustic characteristics. Furthermore, while, in the above embodiments, a variable resistor has been employed as varying means for varying the level of the speech signal, the varying means may be other elements such as a variable attenuator, a variable amplifier, a combination of an amplifier and a variable resistor, and a combination of an amplifier and a variable attenuator (C18, L1-15).

It would have been obvious to one skilled in the art at the time of the invention to modify Hawker, such that an attenuator/variable amplifier is used, to provide proper signal levels between the transducer and earpiece output.

### ***Allowable Subject Matter***

1. Claim 19 is allowed.
2. Claims 3-5, 8-12 and 15-17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta



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